

Cattle lameness is one of the most significant welfare and productivity issues in dairy farming. Studies over the last 25 years have indicated that few significant improvements have been made in dairy cow lameness incidence in that time, yet there is increasing awareness of lameness (or **mobility**) problems in the industry, with training and accreditation for [cattle foot trimming](#); and greatly increased understanding of how lameness can impact on cow welfare, and thus [productivity and longevity](#).

The best all-encompassing definition of lameness includes any abnormality which causes a cow to change the way that she walks, and can be caused by a range of foot and leg conditions, themselves caused by disease, management or environmental factors. This can include hock damage, bruising, sores and cuts in addition to hoof conditions caused by disease; some farmers may traditionally only have counted the latter when considering if a cow is lame or not. Controlling lameness is a crucial welfare issue, and is increasingly an inclusion in welfare assurance schemes.

Several studies have aimed to measure the actual level of lameness **incidence** in UK dairy herds and it has been estimated that, on average, more than half the cows in some herds could experience lameness problems in any single twelve-month period. There is, however, a large range of incidence between farms, which strongly suggests that dairy cow mobility can be improved through herd management changes. Most of these studies identify, in terms of lameness **prevalence**, that around one quarter of all dairy cows may be experiencing some degree of lameness at any one time.

Depending upon the specific problem and its severity, lameness is likely to have a large impact on a cow's performance in terms of yield, fertility and longevity. The average cost of an incidence of lameness, in terms of treatment costs, loss of yield and potential for shortened productive life of the cow may be in the region of £180; at current levels of incidence this could equate to a financial loss of nearly £15,000 for an average-sized herd, or to put it another way, a cost of well over 1p per litre of milk produced on the farm. Lameness can also lead to other herd health problems; it can be a cause of or complicate mastitis, metabolic illnesses and fertility problems due to impeded mobility and behaviour.

The general causes of lameness are multi-factorial, but are generally recognised as poor quality floors in cattle housing, poor cow tracks, cows being forced to stand for too long on hard surfaces, poorly-designed cubicles, ineffective foot trimming, infectious diseases and poor nutrition, and while in isolation they are reasonably well-understood - as is how to prevent lameness occurring in the first place - the problem lies in being able to:

- Identify the specific reason(s) for a particular herd's mobility problems.
- Make an accurate measurement of the levels of lameness within a herd.
- Effectively manage mobility problems by preventative measures and devising the best forms of treatment that fit in well with routines on the farm.

Good record-keeping and effective recognition of the problems on individual farms can help in determining suitable strategies for reducing future mobility problems specific to individual herds. **The AHDB Dairy Healthy Feet Programme** works on the 'lameness map' principle, producing a graphic plan based on information about herd problems, their causes, incidence and prevalence and can assist in dealing with the specific issues relating to that farm, allowing priority to be given to solving the problems causing the farm's main mobility issues.

Routine foot trimming has become an important tool for dairy farmers in controlling mobility problems in the herd. Nearly all lameness problems originate around, in or between the claws, and therefore a simple, safe - for the operator as well as the cow - and effective system for handling and inspecting cows' feet will encourage prompt inspection and treatment, particularly on farms where farm staff members and not outside contractors regularly perform [foot trimming](#).

Every animal in the herd should have its feet lifted, inspected and if required trimmed at least once every year, ideally at drying-off. If practicable, a further inspection mid-lactation may also be useful in spotting potential problems, if this is not likely to coincide with either turnout or housing.

The primary aims of good foot trimming are:

- Returning hooves to the ideal shape so that they are balanced, better capable of supporting the cow's weight and less likely to be affected by future problems.
- Removing horn around an ulcer or lesion in order to reduce any pain caused by the lesion by reducing the pressure on it as the cow transfers weight onto the claw when walking, promoting increased mobility and aiding healing. This may also involve the fitting of a 'block' or similar device to further reduce the trauma of a lesion.
- Removing dead and diseased horn and other tissue to promote the growth of healthy new horn.
- Removing horn to promote the draining of muck and slurry from around a lesion - and also any pus formed by an infection - to discourage the formation of abscesses.

Where either routine inspection, inspection prompted by regular Mobility Scoring or a specific lameness issue indicates a foot problem, farm staff should only trim if they have sufficient competence in, experience of and are preferably trained in foot trimming procedures. Organisations such as LANTRA and NPTC, as well as veterinary groups and agricultural colleges, provide foot trimming courses aimed at dairy farmers and herdspeople. The **Dutch Five Step method** is the standard recognised means of trimming cattle feet.

Knowledge of the various potential causes of lameness is paramount in devising the correct course of treatment, particularly where infection is present or large amounts of the hoof horn are affected; poor diagnosis and over-trimming can lead to further problems, causing increased pain and lengthening recovery times, rather than the desired aim of trimming in speeding recovery.

It is also important that - particularly where infectious illnesses such as [digital dermatitis](#) are present in the herd - the foot trimmer understands and follows hygienic procedures in order to limit the spread of infectious illness between cows in the herd.

The use of a trained self-employed foot trimming contractor should be considered where staff members do not have the time or skills to deal with large numbers of cows, either routinely or where Mobility Scoring has identified the need for extensive foot trimming. Specialist foot-trimmers are also likely to be professionally-trained, be highly-experienced in identifying and diagnosing problems and will be equipped with the most effective tools to efficiently inspect and treat large numbers of cows.

The National Association of [Cattle Foot Trimmers](#) provides a database of its members which includes details of training levels. Categories range from those who are self-taught up to trained members who hold certificates of competence and undergo frequent re-assessment.